

/AN EVALUATION OF DISTRESS IN ASPHALT PAVEMENTS AND
SOME PREVENTIVE MEASURES/

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A MASTER'S REPORT

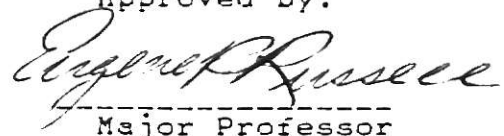
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I N T R O D U C T I O N

Over the past 100 years, and in an accelerated fashion in the past 25 years, the USA has developed an extensive road system. The main part of this system is a network of about two million miles of paved roads, that have an obvious impact on the economy, education, recreation, life style and national defense of the country. Realizing the vitality of roads to the country and to the individual, it is a matter of concern that there is a gradual decrease in its percentage of good milage, both rural and urban, as also stated by the Secretary of Kansas Dept. of Transportation during the March, 1985 Annual Transportation Conference at Kansas State University.

" ---29 percent of the state roads are deteriorating rapidly, and 11 percent have already deteriorated; ---- if nothing is done, 90 percent of the state interstate by 1990 would be classified as deficient---"

As a majority of total milage of roads in this country are asphaltic, the topic of this report is, " AN EVALUATION OF DISTRESS IN ASPHALT PAVEMENTS AND SOME PREVENTIVE MEASURES ".

As a natural phenomenon, any type of road starts wearing out once opened to traffic. The badly deteriorated roads not only cost more to maintain and rehabilitate, they drastically and adversely affect vehicle fuel consumption, operating costs, and traffic delays resulting in significant economic loss as shown in Figure 1 and Table 1.